

ABSTRACT

Analytical determination of active compounds by liquid chromatography

Diploma Thesis

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This paper deals with the HPLC evaluation of dexamethasone in ointment base. Dexamethasone was analysed by the use of a C-18 column, a water: acetonitrile (40:60) mobile phase, flow rate of 0,6 ml/min and a UV detector set at 239 nm. An internal standard was used for quantitative determination. Acetonitrile was shown to be the best solvent for the isolation of dexamethasone from the ointment base. A calibration curve was constructed and verified, by means of which the concentration of dexamethasone in ointment was determined. The elaborated method was validated. Validation parameters: precision, accuracy, selectiveness, linearity, detection limit, quantitative limit and robustness were evaluated.